

Recovery Plan Action Status

Plan Name: South Florida Multi-Species Recovery Plan (68 spp.)

Plan Status: Final

Plan Date: 18-May-99

Lead Agency: USFWS

Lead Office: South Florida Ecological Services Field Office

(772)
562-3909)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Carter's mustard (Warea carteri)	2	waca-h1.1	Secure habitat through acquisition, landowner agreements, and conservation easements for Carter's mustard (Warea carteri).	Partially Complete	Prior to FY 1995		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-h1.2.1	Conduct prescribed burns.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Cost is per acre (ex. 1.0/acre); Total cost dependent upon number of acres burned. Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-h1.2.2	Control and eliminate exotic and invasive plants and animals.	Ongoing Current	FY 2006		U.S. Fish and Wildlife Service, Florida Department of Transportation, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry, Water Management Districts	Work type not yet selected	Labor type not yet selected	Cost is per acre (ex. 2.0/acre); Total cost dependent upon number of acres infested with exotics. Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-h1.2.3	Control access to areas where listed plants are growing.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Task currently conducted and cost is included in responsible agency's budget. Action lead(s): FWS

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Carter's mustard (Warea carteri)	3	waca-h2.1	Restore natural fire regime.	Not Started			U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Cost is per acre (ex. 1.0/acre); Total cost dependent upon number of acres burned. Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-h2.2	Enhance sites with native plant species.	Not Started			U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Cost is per acre (ex. 0.5/acre); Total cost dependent upon number of acres enhanced. Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-h3.0	Conduct habitat-level research projects.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Private industry, landowners, etc., Public and private universities	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-h4.0	Monitor habitat and ecological processes.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-h5.0	Provide public information about scrub and its unique biota.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s1.1.1	Survey scrub habitat in the coastal counties.	Not Started			U.S. Fish and Wildlife Service, Florida Natural Areas Inventory, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS

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Carter's mustard (Warea carteri)	2	waca-s1.1.2	Continue surveys in Polk and Highlands Counties.	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Florida Natural Areas Inventory	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s1.1.3	Continue surveys on protected lands.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s1.2	Maintain distribution of known populations and suitable habitat in GIS database.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s2.1	Protect privately-owned habitat through acquisition, conservation easements, or agreements with landowners.	Not Started			U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	Cost dependent upon type of protection provided. Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s2.2	Protect populations on public lands.	Ongoing Current	Prior to FY 1995		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Cost dependent upon type of protection provided. Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s2.3	Use local or regional planning to protect habitat.	Not Started			U.S. Fish and Wildlife Service, South Florida counties	Work type not yet selected	Labor type not yet selected	Cost included in standard operating procedures of participating agency's budget. Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s2.4	Conserve germ plasm.	Not Started			U.S. Fish and Wildlife Service, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS, private

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Carter's mustard (Warea carteri)	3	waca-s2.5.1	Initiate section 7 consultation when applicable.	Ongoing Current	Prior to FY 1995		U.S. Bureau of Land Management, U.S. Department of Agriculture, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Natural Resources Conservation Service, United States Coast Guard, U.S. Air Force	Work type not yet selected	Labor type not yet selected	Cost included in standard operating procedures of Federal agency's budget. Action lead(s): All Federal agencies
Carter's mustard (Warea carteri)	3	waca-s2.5.2	Enforce take and trade prohibitions.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Florida Department of Agriculture and Consumer Services/Division of Plant Industry	Work type not yet selected	Labor type not yet selected	Cost included in standard operating budgets of participating agencies. Action lead(s): FWS, FDACS/DPI
Carter's mustard (Warea carteri)	2	waca-s3.1	Continue research to determine demographic information.	Not Started			U.S. Fish and Wildlife Service, Private industry, landowners, etc., Public and private universities	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s3.2	Once demographic data are known, conduct population viability and risk assessment analysis.	Not Started			U.S. Fish and Wildlife Service, Private industry, landowners, etc., Public and private universities	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s3.3	Conduct research to assess management requirements of Carter's mustard.	Not Started			U.S. Fish and Wildlife Service, Private industry, landowners, etc., Public and private universities	Work type not yet selected	Labor type not yet selected	Archbold has been conducting seed bank research for several years. Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s4.1.1	Monitor to detect changes in demographic characteristics.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS

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Carter's mustard (Warea carteri)	2	waca-s4.1.2	Monitor the effects of various land management actions on Carter's mustard.	Ongoing Current	FY 2007		U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	2	waca-s4.2	Develop a quantitative description of the population structure of Carter's mustard.	Complete	FY 2007	FY 2009	U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-s5.1	Public outreach efforts must also continue to address the increasing concern that horticultural demand for this and other rare species may not benefit conservation of threatened and endangered species.	Not Started			U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Carter's mustard (Warea carteri)	3	waca-s5.2	Private landowners should be made aware of the rarity of W. carteri and its specialized habitat needs.	Not Started			U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Private industry, landowners, etc.	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS